ABSTRACT OF THE DISCLOSURE

A method is disclosed which reduces the boundary effects on an image based on maintaining local gray. The image is first halftoned and an adjustment is then made at the boundary region to minimize the brightness deviation of the halftone from the original contone. The adjustment is composed of three steps. First, a low-pass filtering is performed in halftones in the boundary regions, which are typically a few pixels wide along the boundary. The filtering result is then compared to the original contone image and an error map is generated. Finally, the pixels in the boundary regions are adjusted to reduce the magnitudes of the errors.